

E. hirsuta (Torr.) Wiegand. Dry sand, especially by railways; Lowell, Concord, Ayer, Cambridge, S. Boston, Wellesley, Natick.

E. maculata L. Dry sand and gravel, very common throughout.

E. MARGINATA Pursh. Vacant lot, Boylston St., Boston, now extinct (*W. P. Rich*, Aug. 24, 1879. See RHODORA x. 152, 1908); waste place by (or in) salt marsh, a few plants (*F. W. Grigg*, Aug. 9, 1913. Specimens in herb. F. W. Grigg).

E. PEPLUS L. Waste places and gardens; sporadic at Salem, Woburn, Somerville and Lynn; Tremont St., Boston (*W. Boott*, Sept. 11, 1853).

E. PLATYPHYLLA L. Rubbish heap, not persistent, Cambridge (*W. Deane*, Oct. 10, 1885).

E. polygonifolia L. Seashore sands from Salisbury to Duxbury.

E. Preslii Guss. Sandy soil and waste places, rare (twelve stations).

E. PROSTRATA Ait. Cotton waste, Malden (*F. S. Collins*, Sept. 20, 1890. Specimen in herb. N. E. Botanical Club). Native of tropical America.

MERCURIALIS.

M. ANNUA L. Newburyport ("E. U." 1880); E. Somerville freight-yards (*A. S. Pease & A. H. Moore*, Oct. 20, 1903); Boston (*J. A. Lowell*, no date); yard, Newtonville (*F. W. Grigg*, Aug. 24, 1912).

RICINUS.

R. COMMUNIS L. Dump, Cambridge (*M. L. Fernald*, Sept. 26, 1908); railway dump, Dedham (*Sydney Harris*, Aug. 22, 1897; *E. F. Williams*, Oct. 2, 1898).

C. H. KNOWLTON } Committee on
WALTER DEANE } Local Flora.

CAREX NOTES.

IRA W. CLOKEY.

CAREX arapahoensis, spec. nov. Growing in small clumps; the culms stiffly erect, rather stout, 2–4 dm. high, somewhat exceeding the leaves, minutely rough on the angles below the head, aphyllopodic. Leaves with well developed blades 4–7 to a fertile culm, on the lower

third of the culm, somewhat bunched; the blades flat, the upper long-attenuate, 1.5–3 mm. wide, 12–25 mm. long, minutely rough on the edges; lower sheaths without blades light brown, sheaths overlapping; ventral band hyaline, white or light-green. Heads ovoid, 13–20 mm. long; spikes 3–5, closely aggregated, gynaeandrous, 8–11 mm. long, 4–8 mm. wide, rounded at base, rounded or somewhat pointed at apex. Bracts scale-like, with brown center and broad white hyaline margin, shorter than the head, the lowest frequently stiff and attenuated. Scales ovate, blunt, about as long and broad as the perigynia, chestnut-brown with white hyaline margin especially well marked in the staminate and lower pistillate scales. Perigynia hidden by the scales, ascending, dark brown at maturity, dull obscurely nerved on both faces, winged, ovate, 4.5–5.25 mm. long, 2–2.25 mm. wide, broadest near the top of the achene, contracted at base, sessile, rather abruptly contracted into a flat winged bidentate beak serrulate to the tip; teeth erect 1 mm. long. Achenes oval, 2 mm. long, 1.2 mm. wide, light brown and dull at maturity, substipitate; style slender; stigmas 2.

The above description is based on plants found growing abundantly in dry soil at an elevation of 3550 m., 200 m. above the timber line, on Mt. Arapahoe, Boulder County, Colorado. My number 3227, preserved in my herbarium, is designated as the type. At the type-locality are found *Carex albo-nigra* Mack. and *C. ellynoides* Holm.

CAREX subimpressa, spec. nov. "*Carex impressa* (Wright) Mackenzie \times *Carex lanuginosa*, Michx." Clokey, *Torreyia*, vol. 16, no. 9, Sept., 1916.

This hybrid has become so well established and shows such vigor, having become more abundant than either parent at the type locality, that it should be given rank as a species. My number 2338, preserved in my herbarium, is designated as the type.

CAREX TRIBULOIDES, Wahl. var. **sangamonensis**, var. nov. Growing in small clumps from short stout rootstocks. Culms 2.2–6.5 dm. high, slender, soft, sharply angled, very slightly rough on the edges just below the head, about the length of the leaves of the fertile culms. Leaves on the fertile culm 4–8, on the sterile very numerous, 1.5–4 mm. wide, scattered, soft, flat, ribbon-like, gradually tapering to a delicate point, rough on the edges, those of the sterile culms frequently much longer than the fertile culms. Sheaths overlapping, lowest somewhat fibrillose at base. Inflorescence *erect or somewhat flexuous*, 2–4.2 cm. long; spikes 4–6. occasionally 3 or 7 and rarely 8, dull green or straw-color, sessile, obovoid, blunt, slightly to decidedly

clavate at base, 6–12 mm. long including staminate part (frequently constituting one third or more of the longer spikes), 3–6 mm. wide, irregularly separated to approximate. Bracts absent or the lower 1–3 present, setaceous, shorter or longer than the head. Staminate flowers basal. Perigynia 3–4 mm. long .9–1.25 mm. wide, straw-colored over achene, rest light green to straw-color, thin, scale-like, scarcely distended over the achene, several-nerved on each face, straight, tapering to slightly cleft apex, without well-marked beak. Achene 1–1.25 mm. long, .67–.75 mm. wide, dull straw-color, lenticular, elliptical, short-stipitate; style slender. Scale white-hyaline with green midrib to uniform straw-color, acute, .67–.75 the length of the perigynia, narrower than the perigynia. Stigmas 2.

This well marked plant is found growing in rich alluvial soil in two small widely separated areas in Macon County, Illinois. My number 2364, preserved in my herbarium, is designated as the type. My number 2362 also belongs here. At the type-locality the plant is found growing with *Carex Leavenworthii* Dewey, and *C. muskingumensis* Schwein. It may be separated from the typical form of *C. tribuloides* Wahl., and from Bailey's varieties *turbata* and *reducta* by the following key.

Spikes 3–7; leaves 1.5–4 mm. broad. *C. tribuloides*, v. *sangamonensis*.
Spikes 8–14; leaves 3–8 mm. broad.

Perigynia with appressed tips.

Inflorescence moniliform, spikes scattered. . . . *C. tribuloides*, v. *turbata*.

Inflorescence cylindric, spikes approximate. . . . *C. tribuloides* (typical).

Perigynia with spreading tips, inflorescence flexuous.

C. tribuloides, v. *reducta*.

Var. *sangamonensis* is in some respects between varieties *turbata* and *reducta*, in others different from all other forms of the species. A large number of specimens show that the tips of the perigynia are frequently straight with the perigynia slightly spreading, not appressed as in var. *turbata*, nor recurved as in var. *reducta*. Many of the heads show a flexuous inflorescence with decidedly separated spikes. The small number of spikes is a regular thing, not an exception. Out of several hundred plants carefully examined, only 2–3 heads were found with 8 spikes, a relatively small number with 3 or 7 spikes, and probably over 90% with 4–6 spikes. Another point of difference is in the perigynia which, when fully mature, measure 3–4 mm. with the average of 3.5 mm. long.

DENVER, COLORADO.